

Die
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herausgegeben von

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Blattidae

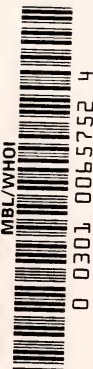
by

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(Oxford).

With Plate XIII.



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I am indebted to Dr. W. MICHAELSEN and Dr. R. HARTMEYER for the opportunity of examining the very interesting collection of *Blattidae* formed on the Hambourg expedition to S. W. Australia. All the specimens are preserved in alcohol, so that study of structural details is rendered more easy than is usually the case with dried specimens. The collection illustrates admirably the fact that Australia is the head-quarters of the apterous cockroaches belonging to the *Polyzosteria*-group of the subfamily *Blattinae*, no fewer than 27 species out of a total of 41 being of this section. There are only very few and scattered species of the *Polyzosteria*-group in extra-Australian regions, if we exclude the neotropical genera *Eurycotis* and *Pelmatosilpha*, which, though presenting one constant difference from *Polyzosteria* and its allies in the greater distance apart of the eyes, are nevertheless very closely allied to the Australian genera. Australia presents so many evidences of the great antiquity of its fauna that I should like to be able to assert with confidence that the *Polyzosteriae* constitute a very ancient group of cockroaches, but this I cannot conscientiously do. The geological evidence is directly opposed to the view that apterous *Blattidae* are more primitive than winged forms and the method of depositing the eggs in a chitinous capsule as do all the *Blattinae* cannot be regarded as other than a highly specialised habit; we can only say that it is probably a more primitive habit than is viviparity in this group of *Orthoptera*. It is quite likely that the climatic conditions of Australia are in part responsible for the large proportion of apterous species of *Blattidae* in that continent; without being able to explain the reason it is nevertheless the fact that in desert regions or in regions where droughts are of long duration apterous species of *Blattidae* are more numerous than winged species, whilst in the moist jungles of West Africa and the Malay Archipelago the converse is true. The collection of Drs. MICHAELSEN and HARTMEYER illustrates this fact also, for of the 11 species not belonging to the apterous *Polyzosteria*-group, only 6 possess wings capable of flight, and of these 6 species 2 are importations from extra-Australian areas and 1 is winged in the male sex only. 11 of the species in the collection I regard as new to science. A few species are represented by immature forms only and these I have only

occasionally been able to determine; the indeterminable species are not included in the foregoing analysis but as some of the larvae belong to apterous species and some to winged species the general conclusions are not affected. Several of the species are represented by good series.

Subfam. Phyllodromiinae.

Genus *Phyllodromia* Serv.

Phyllodromia germanica (L.).

Blatta germanica LINNAEUS, Syst. Nat. (ed. XII) I, p. 668 (1767).

2 ♀ examples of this cosmopolitan species.

Stat. 65, Denham; Coll. Mus. Hamburg, Fremantle, W. WÖLTING leg. 1907.

Phyllodromia sp.

1 ♂ example in condition so poor that it is not advisable to describe it. Stat. 103, Guildford.

Phyllodromia liturata Tepp.

Phyllodromia liturata TEPPER, Tr. Roy. Soc. S. Australia, XIX, p. 150 (1895).

I refer to this species with some doubt 1 ♀ larva.

Previously recorded from Victoria.

Stat. 103, Guildford.

Genus *Allacta* Sauss. et Zehnt.

Allacta similis (Sauss.).

Blatta similis SAUSSURE, Mém. Soc. Sc. phys. Genève, XX, p. 245 (1869).

Stat. 162, Torbay (1 ♂, 3 ♀).

Genus *Ceratinoptera* Br.

Ceratinoptera ensifera n. sp.

Plate XIII, Fig. 8, 15.

♂. Head testaceous, a band between the eyes, 6 spots on the face, and the labrum castaneous. Antennae longer than the body, testaceous in basal half, remainder fuscous. Pronotum trapezoidal, anteriorly not covering vertex of head, posteriorly truncate, disc castaneous with some testaceous maculae symmetrically arranged, bordered anteriorly and laterally with hyaline, the inner margin of the lateral border sinuate. Scutellum exposed, testaceous with two castaneous stripes. Tegmina lanceolate not extending beyond the 7th abdominal tergite, rufo-castaneous, mediastinal

area hyaline, a piceous humeral stripe; 12 costals, 5 longitudinal discoidal sectors, posterior ulnar a branch of the anterior ulnar, anal vein not clearly marked, its apex reaching a point at one-half of the total length of the tegmen. Wings minute, bent across the metanotum, so that their under-surface is uppermost, their apices overlapping, the posterior part not doubled under the anterior part; 3 irregular costals, median vein bifurcate at apex, ulnar vein obsolescent, 4 axillary veins, the first bifurcate. Abdomen above testaceous at base, remainder rufo-castaneous, laterally margined with testaceous; posterior angles of 9th tergite strongly produced backwards; supra-anal lamina transverse, posterior margin concave, posteriorly produced to form a flattened narrow process terminating in two diverging spines. Abdomen beneath rufous broadly bordered with testaceous, a few brown maculae in the testaceous border; subgenital lamina slightly asymmetrical, two styles. Cerci moderate, acuminate, 11-jointed, testaceous above, banded with fuscous beneath. Legs testaceous, anterior coxae spotted with fuscous. Front femora on anterior margin beneath with a complete row of spines, the more distal shorter than the proximal, 2 spines on posterior margin beneath. Mid- and hind-femora strongly armed with 6—7 spines on anterior margin, 4—5 on posterior margin beneath.

♀. As above but the testaceous maculae on disc of pronotum fused. Abdomen shorter and broader, piceous above and beneath (except at base) laterally margined with testaceous. Supra-anal lamina triangular, piceous with a testaceous spot at apex. Subgenital lamina semi-orbicular, ample. All the coxae spotted with fuscous.

Length of body (♂) 12 mm., (♀) 11.5 mm.; length of tegmina (♂) 7.8 mm., (♀) 7.6 mm.; pronotum (♂ and ♀) 3.8 mm. \times 5 mm.

Stat. 129, Jarraldale; Stat. 138, Lunenberg; Stat. 144, Bridgetown. (1 ♂, 2 ♀, 1 larva.)

Remarks. A very distinct and remarkable species.

The ootheca is chitinous, 6 mm. in length, is divided into 18 loculi and the suture is dentate. In the larva the thoracic tergites are testaceous with a few castaneous spots and broad lateral castaneous bands outwardly margined with hyaline.

Genus *Temnopteryx* Br.

Temnopteryx platysoma (Walk.).

Plate XIII, Fig. 1, 2.

Blatta platysoma WALKER, Cat. Blatt. Brit. Mus., p. 111 (1868).

WALKER's description is very inadequate, so I furnish a new diagnosis of the species.

♂, ♀. Testaceous. Vertex of head not covered by pronotum. Pronotum trapezoidal, lateral margins broadly hyaline, posteriorly truncate, exposing the scutellum, disc with two minute brown dots near the posterior margin, a slender castaneous line defining the inner borders of the lateral hyaline margins. Tegmina quadrate, not extending beyond the 1st abdominal tergite, sutural margins overlapping, outer angles rounded; 3 costals, 1 discoidal sector, anal vein not impressed, 2 axillaries, all the veins indistinct, their course marked by castaneous dots situated serially on either side of every vein. Wings absent. Meso- and metanotum with a few castaneous dots symmetrically arranged. Abdomen rufo-testaceous; supra-anal lamina (♂) shortly trigonal, (♀) triangular, apex notched; subgenital lamina (♂) triangular, cucullate, considerably exceeding the supra-anal lamina, apex deeply cleft, styles triangular, springing from the inner margins of the cleft in the lamina, (♀) semi-orbicular, ample. Margins of abdomen of ♀ beneath rufo-castaneous. Cerci moderate, 8-jointed. Legs moderately strongly spined; front femora with a row of piliform setae on the anterior margin beneath; mid- and hind-femora with 4--5 spines on both margins beneath.

Total length (♂) 7 mm., (♀) 7.5 mm.; length of tegmina 3 mm.; pronotum 2.5 mm. × 3.2 mm.

The ootheca is chitinous and carried with the suture uppermost.

(Several examples of both sexes.)

Stat. 115, North Fremantle; Stat. 146, Boyanup; Stat. 162, Torbay.

Remarks. 1 ♂ and 1 ♀ from the first of the above localities were found in the nest of a spider of the genus *Phryganoporus*; this symbiotic association is very remarkable; these specimens are more heavily marked than the rest. The systematic position of this species is a little doubtful, for it presents great similarity to some species of *Hololampira* (*Ectobiinae*); the differences separating the two subfamilies *Ectobiinae* and *Phyllodromiinae* are very slight and elusive but for the present at any rate I think that *Hololampira* should be limited to those small species of *Blattidae* with reduced tegmina, with the supra-anal lamina transverse in both sexes and with the mid- and hind-femora very sparsely armed¹). The species *T. ectobioides* mihi and *T. affinis* mihi from E. Africa present many features of resemblance to this Australian species.

1) The inclusion of *T. platysoma* in the genus *Ceratimoptera* by me (Gen. Insect. Blattidae, Phyllodromiinae, Fasc. 73) is due to a slip.

Genus *Loboptera* Br.*Loboptera circumcincta* Tepp.

L. circumcincta TEPPER, Tr. Roy. Soc. S. Australia, XVII, p. 37 (1893).

Stat. 65, Denham; Stat. 67, Dirk Hartog, Brown Station; Stat. 72, Northampton; Stat. 94, Coolgardie; Stat. 99, Lion Mill; Stat. 103, Guildford; Stat. 118, Fremantle; Stat. 152, Gooseberry Hill; Stat. 155, York. (14 ♀.)

Loboptera duodecimsignata Tepp.

L. duodecimsignata TEPPER, l. c. p. 36 (1893).

Stat. 99, Lion Mill; Stat. 109, Subiaco; Stat. 112, Karrakatta; Stat. 114, Buckland Hill; Stat. 119, Fremantle, Obeliskhügel. (7 ♀, 1 larva.)

Remark. The males of these two species must be extremely rare, as they have never been discovered, though the females are common enough.

Subfam. Epilamprinae.

Genus *Epilampra* Burm.*Epilampra* sp.

3 larvae that I am not able to determine with any greater degree of accuracy.

Stat. 65, Denham; Stat. 88, Moora; Stat. 145, Donnybrook.

Subfam. Blattinae.

Genus *Polyzosteria* Burm.*Polyzosteria cuprea* Sauss.

Polyzosteria cuprea SAUSSURE, Mém. Soc. Sci. phys. nat. Genève, XVII, p. 133, pl. 1, f. 2 (1864).

Stat. 165, Albany; Stat. 167, South Albany. (1 ♂, 1 ♀.)

Polyzosteria pubescens Tepp.

Polyzosteria pubescens TEPPER, Tr. Roy. Soc. S. Australia, XVII, p. 75 (1893).

Stat. 91, Mount Robinson near Kalgoorlie (1 ♀.)

Polyzosteria subverrucosa (White).

Blatta subverrucosa WHITE, in: GREY, Journ. Exped. Australia, II, p. 467 (1841).

Coll. Mus. Hamburg, Hill country of Upper Blackwood district; J. WHISTLER leg. (1 ♀.)

Polyzosteria Mitchellii (Angas).*Blatta Mitchellii* ANGAS, S. Australia Illustr., pl. 48, f. 1 (1847).

Coll. Mus. Hamburg, Fremantle; W. WÖLTING leg. 1907 (1 ♀).

Genus *Platyzosteria* Br.*Platyzosteria ruficeps* n. sp.

Plate XIII, Fig. 3.

♂. Piceous, nitid, impunctate. Vertex of head orange-rufous, antennae flavid. Coxae, femora, cerci, supra-anal and subgenital laminae rufocastaneous. Tegminal rudiments absent. Supra-anal lamina subquadrate, angles rounded, posteriorly emarginate, margins serrate, slightly exceeded by the cerci. Lateral margins of 7th abdominal tergite not serrate, its posterior margin sinuate. Subgenital lamina subquadrate, posterior margin slightly sinuate and finely dentate. Coxae bordered with pale testaceous. Tibiae and tarsi piceous. Length 24 mm.; pronotum 6.1 mm. × 10.1 mm.

Stat. 88, MOORA (1 ♂).

Remark. The only species of the genus with rufous vertex.*Platyzosteria invisa* (Walk.).*Periplaneta invisa* WALKER, Cat. Blatt. Brit. Mus., p. 137 (1868).

Stat. 75, Geraldton; Stat. 158, Broome Hill; Coll. Mus. Perth, ?Murchison district (hab. doubtful!).

Platyzosteria atrata (Er.).*Periplaneta atrata* ERICHSON, Arch. Naturg., VIII, p. 248 (1842).

Stat. 95, Boorabbin (2 ♂).

Remark. The continental forms of this species frequently have the thoracic tergites margined with rufous and the tibiae partly rufocastaneous.

Platyzosteria consobrina (Sauss.).*Polyzosteria consobrina* SAUSSURE, Rev. Zool., (2) XVI, p. 306 (1864).

Stat. 120, Fremantle, Haus und Garten (1 ♂).

Remark. The type of this species has been lost and it cannot now be recognised with absolute certainty: it may possibly be a larval form of *P. invisa* WALK.

Platyzosteria armata Tepp.

Platyzosteria armata TEPPER, Tr. Roy. Soc. S. Australia, XVII, p. 84 (1893).

Stat. 91, Mount Robinson near Kalgoorlie; Stat. 94, Coolgardie. (5 ♂, 2 ♀.)

Platyzosteria curiosa n. sp.

Plate XIII, Fig. 11, 12.

♀. Piceous, nitid, minutely punctate. Vertex and lateral margins of thorax castaneous. Tegminal rudiments semi-articulated. Posterior angles of 7th abdominal tergite strongly produced. Supra-anal lamina much produced, not cucullate, semi-oval, apex not emarginate, margins inconspicuously serrate, exceeded by the cerci which are rather long.

The suture separating the subgenital valves from 6th abdominal sternite not transverse but V-shaped, the valves themselves not apposed but separated at their apices and depressed. Legs piceous, coxae not margined with testaceous. Length 19 mm.; pronotum 5 mm. × 7 mm.

Stat. 97, Northam (1 ♀).

Remarks. It is possible that this example is not quite mature, but even if this is the case the species is highly remarkable for the structure of the terminal sternites; the backward process of the central part of the 6th sternite seems to preclude the possibility of the complete apposition of the genital valves. A second specimen in the Oxford Museum I refer to this species with some doubt, for though the structure of the apex of the abdomen is the same as in the type example, the legs are rufo-castaneous and the cerci are shorter than the supra-anal lamina. The arrangement of the terminal abdominal sternites in a typical Blattine nymph is shown in Plate XIII, Fig. 13, and a comparison of this with Fig. 11 will show at a glance the peculiarity of *P. curiosa* in this respect.

Platyzosteria scabriuscula Tepp.

Periplaneta scabriuscula TEPPER, Tr. Roy. Soc. S. Australia, XVII, p. 108 (1893).

Stat. 88, Moora; Stat. 98, Wooroloo; Stat. 99, Lion Mill; Stat. 109, Subiaco; Stat. 139, Brunswick; Stat. 144, Bridgetown; Stat. 145, Donnybrook; Stat. 154, Pickering Brook; Stat. 160, Cranbrook. (Several examples of both sexes.)

Platyzosteria obscura (Tepp.).

Periplaneta obscura TEPPER, Op. cit., p. 374 (1893).

With some doubt I refer two examples to this species, which may be re-defined as follows:

♂. Piceous, nitid, except for a few faint punctures on the distal tergites. Antennae fuscous. Tegminal rudiments present, not quite

completely articulated. Supra-anal lamina trigonal, apex truncate and rather deeply emarginate, lateral margins entire and faintly concave, exceeded by cerci. Subgenital lamina quadrate, posterior margin concave, no spine at base of styles. Coxae narrowly bordered with testaceous. Legs piceous. Length 20.1 mm.: pronotum 5.8 mm. \times 8 mm.

The species is near *P. castaneu* BR. but may be distinguished by its smaller size and piceous colour.

Stat. 116, East Fremantle, Recreation Ground (2 ♂).

Platyzosteria morosa n. sp.

Piceous, nitid, impunctate. Antennae piceous in basal third, remainder rufous. Tegminal rudiments present. Posterior margin of 7th abdominal tergite minutely serrate. Supra-anal lamina (♂) subquadrate, posterior angles rounded, lateral margins dentate, posteriorly emarginate, rufo-fimbriate, not scabrous; (♀) triangular, cucullate, lateral margins serrate, apex emarginate. Cerci barely exceeding supra-anal lamina of ♀. Subgenital lamina (♂) quadrate, together with the two preceding sternites scabrous with minute tubercles, a small spine at base of each genital style. Coxae unicolorous.

Length (♂) 21 mm., (♀) 23.5 mm.: pronotum (♂) 6.8 mm. \times 9.1 mm., (♀) 6 mm. \times 9 mm.

Types ♂ and ♀ in Oxford Museum from Adelaide.

The species is near *P. ceratodi* KRAUSS but differs in the absence of punctures on the mesonotum; it also resembles *P. biglumis* SAUSS. (= *subaptera*, BR.), but differs in the completely articulated tegminal rudiments and the smooth impunctate surface.

Stat. 99, Lion Mill; Stat. 101, Mundaring Weir; Stat. 129, Jarrahdale; Stat. 158, Broome Hill; Stat. 165, Albany; Stat. 167, South Albany. (3 ♂, 3 ♀.)

Platyzosteria conjuncta n. sp.

Plate XIII, Fig. 5, 6.

Allied to *P. glabra* WALK. but smaller and the legs castaneous.

Tegminal rudiments about three-quarters articulated. Supra-anal lamina (♂) quadrate, angles acute, and armed with a fine spine, posteriorly not emarginate, rufo-fimbriate; (♀) bluntly triangular, cucullate, margins entire, posteriorly emarginate. Subgenital lamina (♂) quadrate, a prominent blunt process at the base of each style on the inside. Coxae not bordered with testaceous. Length (♂) 17 mm., (♀) 20 mm.: pronotum 5-6 mm. \times 7-8 mm.

The species can be distinguished from *P. scabriuscula* TEPP. by the absence of scabrous points, by the non-emarginate ♂ supra-anal lamina, and by the form of the subgenital lamina: from *P. obscura* (TEPP.) it can be distinguished by the last two characters mentioned and by the castaneous legs, whilst *P. morosa* n. sp. differs in having a spinous ♂ supra-anal lamina.

Stat. 137, Collie (1 ♂ and 1 ♀ in coitu).

***Platyzoisteria inclusa* (Walk.).**

Plate XIII, Fig. 4.

Periplaneta inclusa WALKER, Cat. Blatt. Brit. Mus., p. 140 (1868).

Stat. 71, Northampton: Stat. 75, Geraldton: Stat. 82, Moonyoonooka; Stat. 88, Wooroloo: Stat. 99, Lion Mill: Stat. 103, Guildford: Stat. 116, East Fremantle, Recreation Ground: Stat. 131, Serpentine: Stat. 137, Collie: Stat. 145, Donnybrook: Stat. 160, Cranbrook. (7 ♂, 10 ♀.)

***Platyzoisteria variegata* n. sp.**

Plate XIII, Fig. 14.

♂. Piceous with disc of the thoracic and first 4 abdominal tergites rufo-castaneous; nitid, impunctate. Lateral margins of thoracic tergites and of abdominal tergites 2—5 testaceous. Head testaceous, vertex and a band above the clypeus castaneous. Antennae considerably exceeding the body in length, basal joints testaceous, remainder castaneous. Tegminal rudiments absent. Supra-anal lamina triangular, lateral margins entire, apex truncate and deeply emarginate, a minute spine at each posterior angle. Cerci exceeding the lamina. Subgenital lamina subquadrate, apex widely emarginate, styles moderate. Posterior margin of 7th abdominal tergite markedly sinuate, lateral margins not serrate. Legs testaceous, posterior tibiae and tarsi castaneous; posterior tibiae slightly flattened and expanded. Length 24 mm.; pronotum 7 mm. × 9.5 mm.

The form of the supra-anal lamina distinguishes this species from its nearest allies *P. albomarginata* BR. and *P. brunnea* TEPP.

Stat. 146, Boyanup (2 ♂).

***Platyzoisteria albomarginata* Br.**

Polyzoisteria albomarginata BRUNNER, Nouv. Syst. d. Blatt., p. 212 (1865).

Stat. 94, Coolgardie (1 ♂).

***Platyzoisteria obscuripes* (Tepp.).**

Plate XIII, Fig. 13.

Drymaplaneta obscuripes TEPPER, Tr. Roy. Soc. S. Australia, XVII, p. 112 (1893).

Stat. 118, Fremantle; Stat. 160, Cranbrook. (2 ♂.)

Platyzosteria semiritta (Walk.).

Periplaneta semiritta WALKER, Cat. Blatt. Brit. Mus., p. 143 (1868).

Stat. 103, Guildford; Stat. 113, Cottesloe; Stat. 116, East Fremantle, Recreation Ground; Stat. 136, Harvey; Stat. 146, Boyanup; Stat. 154, Pickering Brook. (5 ♂, 5 ♀)

Platyzosteria Hartmeyeri n. sp.

♂. Piceous, nitid, impunctate. Antennae fuscous, paler at base. Pronotum all round, lateral and posterior margins of metanotum, and posterior margins of mesonotum and of abdominal tergites and sternites pale olivaceous-yellow. Tegminal rudiments present, narrow and semi-articulated. Supra-anal lamina subquadrate, scabrous, apex truncate and slightly emarginate, margins serrate. Cerci short and broad, barely exceeding the lamina. Subgenital lamina subquadrate, a small tooth at the base of each style. Coxae bordered with testaceous, legs rufo-castaneous.

Length 12 mm.; pronotum 4 mm. \times 5 mm.

Stat. 95, Boorabbin (1 ♂, 1 larva).

Remark. The species is very distinct on account of its colouration.

Genus *Cutilia* Stål.*Cutilia heydeniana* (Sauss.).

Periplaneta heydeniana SAUSSURE, Rev. Zool., (2) XVI, p. 317 (1864).

Stat. 165, Albany (1 ♂, 1 ♀).

Genus *Zonioploca* Stål.*Zonioploca medilinea* (Tepp.).

Knephasia medilinea TEPPER, Tr. Roy. Soc. S. Australia, XVII, p. 99 (1893).

Stat. 91, Mount Robinson near Kalgoorlie (3 ♀).

Zonioploca pallida n. sp.

Plate XIII, Fig. 7.

Flavo-testaceous. Vertex and frons finely punctate; antennae, except at base, infuscated. Dorsal surface finely granulate, the granules rufous. Abdominal stigmata distinct. A piceous streak along the anterior margins of the meso- and metanotum (generally concealed in dried specimens). Cerci castaneous except at their extreme tips which are testaceous. Legs testaceous, the spines castaneous, tibiae on their dorsal aspects castaneous. Supra-anal lamina (♂) subquadrate, angles obtuse, posteriorly emarginate, exceeded by the cerci; (♀) triangular, apex emarginate, barely exceeded by the cerci. Subgenital lamina (♂) quadrate, angles acute, posterior margin

concave, styles lateral, acute. Length 20—24 mm.; pronotum 6—7 mm. \times 9—10 mm.

Stat. 84, Dongarra; Stat. 99, Lion Mill; Stat. 121, Rottneest; Stat. 137, Collie; Stat. 139, Brunswick; Stat. 145, Donnybrook; Stat. 146, Boyanup; Stat. 148, Busselton; Stat. 154, Pickering Brook. (5 ♂, 5 ♀.)

The types (ex coll. WILSON SAUNDERS) are in the Oxford Museum; they are labelled Swan River.

Genus *Anamesia* Tepp.

Anamesia polyzona (Walk.).

Plate XIII, Fig. 10.

Polyzosteria polyzona WALKER, Cat. Blatt. Brit. Mus., p. 159 (1868).

Stat. 67, Dirk Hartog, Brown Station; Stat. 80, Eradu; Coll. Mus. Hamburg, Fremantle; W. WÖLTING leg. 1907. (4 ♂, 5 ♀.)

Anamesia Frenchii Tepp.

Anamesia Frenchii TEPPER, Tr. Roy. Soc. S. Australia, XVII, p. 72 (1893).

Stat. 76, Day Dawn; Stat. 80, Eradu. (2 ♂.)

Remark. The species varies considerably, in some specimens the pale borders of the tergites are broad, in others narrow, and the legs vary in colour from castaneous to testaceous.

Genus *Desmozosteria* nov.

Allied to *Zonioploca* STÅL, but the angles of none of the abdominal tergites backwardly produced. Lateral margins of the pronotum incrassated. Tegminal rudiments absent. Dorsal surface punctate or smooth. Supra-anal lamina (♂) quadrate, margins entire, (♀) trigonal, cucullate. Cerci short, flattened. Posterior metatarsus very short, not spined beneath.

This genus stands in the same relation to *Zonioploca* that *Anamesia* does to *Cosmozosteria*.

Desmozosteria Michaelseni n. sp.

Plate XIII, Fig. 9.

♀. Above olivaceous-green. Disc of thoracic tergites flavo-testaceous with a few castaneous maculae. Abdominal tergites with anterior half paler than posterior half, a narrow piceous line between, some piceous spots situated laterally in the pale bands, 7th tergite and supra-anal lamina piceous. Head piceous to castaneous, laterally paler. Antennae rufous at base, remainder fuscous. Abdominal sternites olivaceous, valvules and some markings on penultimate sternite piceous. Cerci orange. Legs rufo-testaceous, tibiae

above castaneous. Lateral margins of pronotum slightly but distinctly incrassated. Thoracic tergites finely and indistinctly punctate. Supra-anal lamina trigonal, margins entire, apex slightly emarginate. Cerci of equal length with lamina, flattened. Length 22 mm., pronotum 7 mm. \times 10.2 mm.

Stat. 95, Boorabbin (1 ♀).

Remark. *Pseudolampra punctata* TEPP. may be allied to this species, but I am quite unable to fix the systematic position of the genus *Pseudolampra* from the description.

Desmozosteria rufescens n. sp.

♂. Above varying from rufous to rufo-testaceous, posterior margins of all the tergites narrowly testaceous. Dorsal surface with large shallow punctures, these absent from the middle of the discs of the meso-, meta-notum and abdominal tergites 1—5 and from the terminal abdominal tergites. Lateral margins of thoracic tergites distinctly incrassated. Antennae, except for basal joint, fuscous. Head, body beneath and legs testaceous. Scent-gland opening visible on 1st abdominal tergite. Supra-anal lamina quadrate, posterior angles acute, lateral margins entire, apex widely emarginate. Cerci shorter than the lamina, testaceous. Subgenital lamina quadrate, apex widely emarginate, styles lateral, long. Length 25 mm.; pronotum 7 mm. \times 10 mm.

Stat. 65, Denham (2 ♂).

Genus *Stylopyga* Fisch.

Stylopyga Michaelsoni n. sp.

♂ and ♀. Castaneous. Head piceous, mouth-parts testaceous. Entirely apterous. Thoracic tergites smooth, nitid, abdominal tergites minutely scabrous. Posterior angles of the ante-penultimate and penultimate abdominal tergites backwardly produced. Supra-anal lamina (♂) subquadrate, posterior angles rounded, posteriorly widely emarginate, slightly hirsute, (♀) triangular, apex notched. Subgenital lamina (♂) subquadrate, posteriorly slightly emarginate, styles stout, acuminate. Cerci short and broad, barely exceeding the supra-anal lamina of the female, 9-jointed. Legs rufo-castaneous, coxae outwardly margined with testaceous. Posterior metatarsus barely longer than succeeding joints, biserially spined beneath, its pulvillus apical, and with a spine on each side; second and third joints not spined beneath, their pulvilli occupying their entire length and with a spine on each side. No tarsal arolia. Length ♂ 18 mm., ♀ 16.5 mm.; pronotum ♂ 4 mm. \times 5 mm., ♀ 4.5 mm. \times 5.1 mm.

Stat. 95, Boorabbin (2 ♂, 2 ♀).

Remark. The tarsal structure resembles that in the genus *Cutilia* and the species may be regarded as intermediate between that genus and *Stylopyga*; the absence of tarsal arolia is characteristic of a good many species of *Stylopyga*.

Genus *Periplaneta* Burm.

***Periplaneta americana* (L.).**

Blatta americana LINNÆUS, Syst. Nat. (ed. X), I, p. 424 (1758).

Stat. 65, Denham (1 ♂, 1 ♀).

Subfam. Oxyhaloinae.

Genus *Ectoneura* Shelf.

***Ectoneura margarita* (Tepp.).**

Ectobia (?) *margarita* TEPPEL, Tr. Roy. Soc. S. Australia, XIX, p. 147 (1895).

Ectoneura figurata SHELFORD, Ann. Mag. Nat. Hist., ser. 7, XIX, p. 43 (1907).

Stat. 95, Boorabbin (1 ♂).

Remark. The species is possibly synonymous with the *Blatta marcida* of ERICHSON.

Subfam. Panchlorinae.

Genus *Oniscosoma* Br.

***Oniscosoma granicollis* (Sauss.).**

Zetobora granicollis SAUSSURE, Rev. Zool., (2) XIV, p. 232 (1862).

Stat. 103, Guildford; Stat. 109, Subiaco, North; Stat. 116, East Fremantle, Recreation Ground; Stat. 146, Boyanup; Coll. Mus. Hamburg, Hill country of Upper Blackwood district; J. M. WHISTLER leg.; Stat. 162, Torbay. (A large number of specimens of both sexes and at all stages of growth.)

Remark. The larval males closely resemble the females.

Explanation of Figures.

Plate XIII.

- Fig. 1. *Temnopteryx platysoma* WALK. Subgenital lamina of ♂.
 Fig. 2. " " " Subgenital lamina of ♂ from the side (ventral surface uppermost).
 Fig. 3. *Platyxosteria ruficeps* n. sp. Apex of abdomen of ♂ from above.
 Fig. 4. *Platyxosteria inclusa* WALK. The whole animal, natural size.
 Fig. 5. *Platyxosteria conjuncta* n. sp. Apex of abdomen of ♂ from above.
 Fig. 6. " " n. sp. Apex of abdomen of ♂ from below.
 Fig. 7. *Zonioploca pallida* n. sp. The whole animal, natural size.
 Fig. 8. *Ceratinoptera ensifera* n. sp. Thorax from above.
 p. pronotum, *m.* mesonotum, *m'* metanotum, *a.* first abdominal tergite, *t.* tegmen.
 Fig. 9. *Desmozosteria Michaelseni* n. sp. The whole animal, natural size.
 Fig. 10. *Anamesia polyzona* WALK. The whole animal, natural size.
 Fig. 11. *Platyxosteria curiosa* n. sp. Apex of abdomen of ♀ from below.
 V. 5th abdominal sternite, VI. 6th abdominal sternite, *va.* genital valves.
 Fig. 12. *Platyxosteria curiosa* n. sp. Apex of abdomen of ♀ from above.
 Fig. 13. *Platyxosteria obscuripes* TEPP. Apex of abdomen of ♀ nymph from below, for comparison with Fig. 11.
 Fig. 14. *Platyxosteria variegata* n. sp. Apex of abdomen of ♂ from above.
 Fig. 15. *Ceratinoptera ensifera* n. sp. Apex of abdomen of ♂ from above. †

